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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Electro-Therapeutics.

By H. LASSING, M.D.,
Of New York.

(Continued from page 384.)

*Hydrophobia; Traumatic Tetanus; Trismus.—
Electro-Magnetism as a Sedative, Anæsthetic,
Cathartic, and Relaxant:*

Hydrophobia.—In October, 1859, I was called to see a young man, aged nineteen, who, as the neighbors said, had been bitten by a mad dog some two months previously. The dog had refused food for over a week before he bit this man. Afterward he foamed at the mouth, appeared to be blind, and, running in his mad career against a stone wall, dashed out his brains. This young man had been sick several days, complaining of pain over his body, headache, etc., and, when I saw him, had strong symptoms of hydrophobia, such as extreme nervousness, spasms, dyspnoea, great thirst, foaming at the mouth, extreme anxiety, pain, and uneasiness about the præcordia. He was continually begging for a drink of water, but when any was brought evinced great horror of it, and when exposed to his view for a few minutes he was thrown into convulsions by the sight. I began by exhibiting opium and morphia, but after administering five grains of the former, and one grain of the latter, and finding no benefit therefrom, resort was had to various narcotics and sedatives by the mouth, anus, epidermis, and even inserted into the cellular tissues and glands, without effect. Various other remedies were administered, all without effect, when I asked the privilege of several professional brethren present, to try electro-magnetism, which was cheerfully accorded me.

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The patient by this time having become entirely unmanageable, making attempts to bite those around him, he was secured and bound to a mattress, a copper wire being wound around both feet, the conductor of the negative post was attached to this wire, and the conductor of the positive pole through a sponge saturated with vinegar and salt was applied to the throat, and over the spine and body generally, with the full power of the battery. This produced instantaneous cessation of the spasms, and while under the influence of electricity, the patient willingly drank liquids, and was free from the usual horror of them; but if they were near him, and the current of the machine was interrupted, all the previous symptoms would recur. I applied the current one half hour, the patient then seemed easier, but the symptoms of hydrophobia, though slighter, were still present. At intervals of an hour I applied the current again for half an hour, and after twelve hours from the time I first applied it, the patient seemed suddenly to collapse; the countenance seemed more anxious; the pulse, which was previously quick and full, now became very feeble; the tongue, previously swollen and dark red, seemed more natural; and the eyes, which were glaring, and pupils dilated, now appeared glassy and sunken. The general appearance of the patient can be better described by saying that he looked like a sea-sick person just previous to emesis; when suddenly a copious perspiration was thrown out, and free vomiting and purging followed, and he finally fell asleep. He awoke in about two hours, and appeared more normal, complaining only of a severe headache, and great weakness. We then gave him an infusion of *scutellaria lateriflora*, and left him. About a week subsequently, being sent for, found the patient had had a slight spasm again that day, which, however, never returned. The current, which he seemed to dread as much as fluids,

was once more applied, and the patient left asleep. No more symptoms of hydrophobia recurred, and patient did well for several months, when I lost sight of him. I should say that no more signs of hydrophobia recurred, had I not read a few weeks since, in an account of a battle, that he was among the killed while fighting in the rebel ranks.

I omitted to state that chloroform and ether were both tried without any effect, previous to the use of electro-magnetism.

Traumatic Tetanus.—A little girl, aged nine, had run a needle into the sole of the foot, and while endeavoring to extract it, broke it off. The piece remaining worked its way through the integuments, and, as I am informed, could be felt upon pressure at the instep, when a surgeon was called in, and after a severe operation of over an hour, partially performed while the patient was under the influence of ether, broke off another piece, not, however, without severely contusing the integuments and muscles of the part. During the ensuing night spasms set in, which, I now think, can be ascribed to the hemorrhage and nervous irritation; but these soon ceased, and the foot and limb became terribly inflamed. On the night of the ninth day, the spasms recurred, and trismus set in. I was then called in, and ordered the tinct. opii, which my predecessor ordered as a lotion, to be stopped; considerable fluctuation could be felt, but the foot felt very hard, and appeared red, and highly inflamed. Patient's countenance betokened great anxiety and pain; pulse irregular. Partially owing to the spasms of the abdominal muscles, and partially to the large quantities of opium previously administered, she suffered from obstinate constipation. I immediately injected about a pint of a solution of ox-gall in water, and retained it by pressure, but no stool was produced, when I extracted two lateral incisors, and inserted the negative pole conductors, properly insulated, on the tongue, and passed the positive pole up the rectum, which produced instantaneous peristaltic movements, and was followed, in about fifteen minutes, by a copious stool. While the current was passing, the spasms ceased, the patient was able to open and shut her mouth. After applying the current for a few minutes over the body generally, I connected the negative pole with a curved bistoury, and laid the tumefied parts well open. A large quantity of pus escaped, and with it the remaining piece of the needle. I then dressed the wound with simple cerate, and administered mor-

phia in syrup. papaveris, in $\frac{1}{2}$ -grain doses. Next day, after a good night's rest, found patient much improved; pulse more regular; free perspiration had set in, and the wound seemed healthy, discharging considerably. A short spasm returned this day, but was speedily subdued by the electro-magnetic current, which was mildly applied over the body generally, especially the spine and affected limb. Every day for a week beef-tea, broth, brandy-punch, and toast were freely given. The wound healed by first intention, and the patient was out of her bed in another week; and now, two months since I treated her, is playing around the street, perfectly well.

In both of these cases, I believe the spasms were subdued by the sedative action of the electro-magnetic current upon the nervous system.

Its anæsthetic action is also shown, as well as its effect, as a cathartic.

I intended to have described a case of a large encysted tumor on the shoulder where electro-magnetism served me as a stimulant, anæsthetic, and escharotic, in extirpating the cyst, etc., but have been unable to see my patient in order to satisfy myself that nothing has recurred. I hope to be able to do so in time for your next number.

To be continued.

Nervous Deafness.

Translated from the French of "Duchenne, De l'Électrisation Localisée." Paris, 1861.

By LAURENCE TURNBULL, M.D.,

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(Continued from page 397.)

It surely will not enter the mind of any one to argue that "the deaf-mute is happier than the half deaf; and, consequently, that it is better to leave the former in his present condition than to give him the idea of a sense which we cannot enable him to possess in its perfection." Just as reasonably might we say, that those thousands of the blind whom the progress of ophthalmology has enabled to see so much of light as suffices to guide them from place to place, to discern the features of a friend, etc.; it would be just as reasonable, I say, to maintain that those blind people were much happier when professional ignorance condemned them to perpetual darkness, under the pretext that it was impossible to give them normal integrity of sight. But it would be merely idle to discuss language which, to call ab-

surd, is to characterize far less severely than it deserves.

Need it be urged, that to preserve, and to utilize the half-hearing when once acquired, we must cultivate it, and know how to avail ourselves of it? Every one knows that if the sense of hearing, natural or acquired, of an only half-deaf subject be not exercised, he will, sooner or later, lose it. That is seen in those institutions where the pupils are taught by signs. He who, by means of the hearing, would teach a half-deaf pupil to speak, must arm himself with great patience, and with no less perseverance.

Some remarks that I have made among my young deaf-mutes, will show how gradual is the education of hearing. As soon as, under the influence of the treatment, that sense began to give signs of vitality, those previously deaf-mutes readily articulated the words that they were enabled to hear. It will be conceived that in the case of young Raymond, (Case 8,) who had never either heard or articulated anything, it was needful (as, indeed, it is needful with all infants) to educate both the hearing and the speech, by teaching him the meaning of each word that he heard or articulated. But in the cases of the other two deaf-mutes, as we know, the speech had been taught by reading on the lips; and the young Albin (Case 9) had thus been taught to speak "almost the same as other people do." As he already knew the meaning of the words that he articulated, I imagined that his hearing would progress far more rapidly than that of Albin; and that it would be sufficient to make him hear and articulate words, in order to give him the instant comprehension of their meaning. To my great surprise, such was not the case. I easily and exactly articulated the words which we, for the first time, made him hear; but he did not seize the meaning, even when the word was habitually spoken by him. It was necessary, then, in order to his comprehension of those words, that we should make him write them, or read them upon our lips. Consequently, in educating him as to hearing, we had to re-educate him as to language.

Previous to subjecting deaf-muteness to the electric mode of treatment which I propose, its diagnosis and cause should be, as far as possible, ascertained. For instance, to what purpose should we thus excite the sense of hearing in an individual whose deaf-muteness is owing to an obstruction of the Eustachian tube, to a vice of conformation,

to a stoppage of development, etc.? Unfortunately, the exploration of the Eustachian tube and of the external auditory conduit is insufficient; and in the existing state of science, semiology possesses no symptom which enables us even to suspect the existence of the anatomical lesions of the inner ear, and of certain alterations of the middle ear; they have only been made known to us by autopsy.

I entertain the hope that my electro-physiological and pathological researches may throw some light upon that obscure point of the diagnosis of deaf-muteness, and at the same time, the prognosis.

If, in fact, in the case of a deaf-mute, the Faradization of the chorda tympani, and of the motor muscles of the little bones, produces the electro-physiological phenomena which are obtained from Faradization of subjects in the normal state, as described, it is reasonable to conclude, thence, that the organs which preside over these functions are sound in the case of that deaf-mute. Thus, under the influence of that electric exploration, the lingual sensation will indicate the integrity of the cord of the tympanum; the sound produced in the depth of the ear at each intermittence will testify to a muscular contraction which will have shaken the membrane of the tympanum, the chain of the little bones, the membrane of the *fenestra ovalis*, the succession of the tympanic liquid, and the sensibility of the auditory nerve excited by that series of movements. We shall then have the physiological proof of the anatomical integrity of those several constituent parts of the middle and the inner ear. Then, if catheterism has already announced that the Eustachian tube is freely open, and if the examination of the external auditory conduit discover nothing abnormal there, we have reason to attribute the deaf-muteness to a paralytico-nervous state; and in that case it will be conceived that the prognosis is favorable.

Now, the Faradization of the cord of the tympanum, and of the motor muscles of the small bones, had, as we have seen, produced in the cases of my three young deaf-mutes these electro-physiological symptoms which I had considered favorable to the prognosis. The discovery of those diagnostic and prognostic symptoms is, if I err not, a progress which no one will dispute.

Conclusions.—There is a species of deaf-muteness, congenital or not, completely independent

of any appreciable anatomical alteration. Consequently, no one is warranted in pronouncing that species of deaf-muteness to be incurable.

The exploration of the middle and inner ear, by the Faradization of the cord of the tympanum, and of the motor muscles of the little bones, enables us almost infallibly to ascertain when the deaf-muteness is not produced by an organic alteration.

It is demonstrated by facts that nervous deaf-muteness may be cured by Faradization of the cord of the tympanum and of the little bones; but at present that mode of treatment has only succeeded in converting deaf-muteness into half deafness.

That state of half deafness obtained in cases of congenital deaf-muteness, exerts a happy and speedy influence upon the moral condition of the child, upon his feelings of affection, and upon his educational receptivity; and, finally, it admits of the development of speech through the medium of the hearing.

To make this subject more complete I have had translated from "Tröltsch,"* his observations upon the chorda tympani and Faradization.

"The chorda tympani branch of the facial nerve passes along the membrana tympani; but, according to the statements of the best observers, it gives off no branches, and appears, therefore, to have no other relation to this cavity than that of merely passing through it. In this place, we shall notice certain phenomena which happen when the ear is Faradized.

"If we pass a moderately strong induction current through the ear, in most instances the patient will experience a peculiar sound in the ear like that of boiling water or a buzzing sound, or a sound like the fluttering of a fly, and a painful sensation of sticking in the ear, varying in intensity, and a painful pricking and drawing-together sensation in the anterior half of the tongue, which, as a general rule, does not extend quite to the tip. Only very rarely, and then generally by means of powerful currents which were passed for the sake of experiment through the ear, did this sensation extend to the tip of the tongue.

"All observers, Duchenne, Erdmann, Baierlacher, think that this sensation in the tongue is produced by the galvanic irritation of the chorda tympani, which, passing on the inner side of the membrana tympani, joins, immediately after its exit by the Glasserian fissure, the lingual branch of the fifth. These two nerves do not lie together in one, as has often been stated, but are connected by filaments throughout the whole course which they run together. The special varieties of this arrangement are numerous; but, as a

general rule, we may say that the further we proceed in the course of these nerves, the closer is their connection. Such is the opinion expressed by Bose in his ably written inaugural dissertation 'On the Maxillary Ganglion of Man,' (Giessen, 1859,) where this matter is fully described.

"A short time since, I had an opportunity of seeing, experimentally on man, the connection of the chorda tympani with the tongue. I had removed from the meatus auditorius externus of a young man several polypous excrescences, and the membrana tympani appeared fissured at its posterior superior part. As I was cleaning it with a brush from blood and pus, the patient experienced an acute sensation in the tip of the tongue on the same side; and after repeated searches, I distinctly saw on the membrane, at the point of perforation, a white point, which, from its appearance and situation, I at once supposed to be the chorda tympani laid bare. I brought my brush to a very fine point, and when I touched the white spot, but at that instant only, the patient experienced the same sensation at the tip of the tongue, which he described as a 'peculiar sticking,' or as a trembling or shaking, or jarring, such as is received from the break of a railroad car. This sensation was always limited to the tip of the tongue, and the patient, who was very intelligent, invariably affirmed it to be there.

"Baierlacher* states that when an induction electricity current is passed through the membrana tympani, if the current is not too feeble, a disagreeable metallic taste is always produced. Although I have frequently tried with strong currents, I have found no taste whatever produced, but only the sticking sensation on the tongue; nor do all patients call the taste metallic; many describe it as 'pasty,' as 'drawing together,' as 'pricking like champagne.' But, besides this, the sensation in the tongue is not always experienced; and, while in many cases it is very marked, even when very weak currents are passed, in others, for a decided impression, it is necessary to pass a tolerably strong, or even a very strong current. It was also observed that the patients who experienced no sensation in the tongue, described almost invariably as very acute the ordinarily inconsiderable pain in the ear, and that even when very weak currents were passed, so that it almost appears to me as if there were an inverse ratio between the intensity of the sensation in the tongue and that of pain in the ear. This pain in the ear comes from the sensitive branches of the trigeminus, which, as we have seen in section seven and section twenty, abundantly supply the meatus auditorius externus and the outer layer of the membrana tympani.

"I confess that the absence of the sensation in the tongue in many individuals is very unintelligible to me. Philipeaux, of Lyons,† attaches

* Die Anatomie des Ohres in ihrer Anwendung auf die Praxis, und die Krankheiten des Gehörorgans. Würzburg, 1861.

* Die Inductions Electricität in physiologisch-therapeutischer Beziehung. Nürnberg, 1861, p. 597.

† Bulletin général de thérapeutique, 30 Nov. 1857.

very great diagnostic importance to it; for, according to him, it only exists in cases whose deafness is curable by general or local treatment, while it is wanting in incurable cases. A means of distinguishing curable from incurable deafness would, indeed, be very acceptable, for it would save us much unnecessary trouble. At present, facts do not prove for or against this proposition; but it is not easily seen how the chorda tympani came to such an importance, and however many functions of this peculiar connection between the facial and trigeminal nerve have been already shown, it has never yet been placed in any relation with the hearing (resp.) with the acoustic nerve. It would be interesting to discover if, perhaps, in healthy individuals also this tongue sensation did not vary.

"In Faradizing the ear, I make the patient hold his head, as much as possible, horizontally; I fill the meatus with tepid water, and dip in the water a thin bar of metal, covered with gutta-percha, and free only at the point, while the other conductor is placed on the dampened mastoid process. Duchenne makes use of a wire in an ivory funnel, which is made like a forceps-shaped ear speculum. The first-named process is at all events simpler, and answers the purpose perfectly, while also the walls of the meatus are protected from painful contact. Duchenne and Erdmann advise to fill the meatus auditorius not wholly, but only half full of water, as otherwise the process is more painful, and neighboring nerves, the temporal branch of the fifth, and the facial, are involved. My experience, and also experiments instituted for the purpose, do not confirm this opinion."

A Case of Traumatic Tetanus successfully treated.

By LAVINGTON QUICK, M.D.,

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J. L. Lamer, Montreal, Canada, aged twenty-five; occupation, machinist. Is of medium stature, rather dark complexion, black eyes, nervous and bilious temperament. Enlisted in the U. S. army June 13th, 1861.

Has always enjoyed good health, with the exception of occasional attacks of intermittent fever, which lasted some eight months. These occurred eight years ago. Between these attacks and the period of his enlistment his health was good. He was at the battle of Bull Run, July 21st, 1861. At that time he suffered two days' privation in eating and drinking.

A few days afterward he complained of headache and pain in his bowels, which he attributed to his privations and drilling exercise. His headache has continued at intervals until his present

sickness. He was wounded in the shoulder at the battle of Williamsburg, on May 5th, 1862. His wound was dressed daily until his arrival at the Adams' House Hospital, five days after its reception.

An examination revealed a large gunshot wound through the right shoulder, entering at the humeral insertion of the deltoid muscle, passing slightly upward, cutting the posterior border of the same muscle, and thence outward. On the day after his admission the assistant surgeon in charge extracted a large mass of lint from the wound, the patient's general condition at the time being pretty good.

May 20th.—Patient complained of what he called cramps in his abdomen, extending posteriorly toward the sacrum, and down his legs. He also complained of an increase of headache. These cramps became more and more severe. He was ordered the usual treatment for colic, such as enemata, fomentations, doses of cathartic medicines, and anodynes. The treatment gave him but slight relief.

May 23d.—Patient shows some tetanic symptoms; opens his mouth with great difficulty, and is occasionally attacked with a spasm, which affects nearly his entire muscular system, but chiefly his thoracic, abdominal, and cervical muscles. He is ordered \mathcal{R} . Chloroform, $\mathfrak{f}\mathfrak{ss}$; spts. ammoniæ arom. $\mathfrak{f}\mathfrak{ss}$; aq. camphoræ, $\mathfrak{f}\mathfrak{ij}$. M. S. A teaspoonful every three hours.

May 24th.—No improvement. The muscular rigidity is confined chiefly to the masseter, abdominal, and cervical muscles, and those of the left thigh. Bowels constipated. Ordered enema and pulv. camphoræ, gr. iij, with pulv. opii, gr. j, every four hours; doses to be alternated with the previous medicine.

May 28th.—Patient remains much the same; passes sleepless nights and days of pain; sudamina have appeared over the chest and abdomen. Has almost continuous spasm of the abdominal and diaphragmatic muscles. Has had for the past two days retention of urine, rendering the use of the catheter frequently necessary. The camphor is withheld, and in its place is substituted acetum opii, $\mathfrak{m}\mathfrak{x}$. The chloroform mixture still continued with the addition of one drop of chloroform to each dose of it. Is allowed milk-punch, and whatever nourishment he can take. Trismus is very decided, pulse feeble and frequent. Bowels do not move unless through action of enemata. Wound is dressed with a strong

solution of sulph. morphia. Wound looks healthy, and is healing.

May 29th.—Some improvement. Patient has slept better. Rigidity of muscles somewhat less. Sudamina still upon chest and abdomen. The doses of chloroform increased one drop daily at each dose of the mixture.

June 1st.—Patient is improving, and is more cheerful; the muscular spasm is less. Trismus less. Sleeps better. The use of the catheter is still necessary.

June 2d.—Looks better this morning than he has during the period of his tetanic attack. Has passed his urine once voluntarily. Takes more nourishment. Sudamina have disappeared. The acetum opii has been gradually increased to ℥xx at a dose, and the chloroform to seven drops more at a dose than was first used.

June 10th.—Muscular rigidity still continues, but the patient is able to open his mouth more. The spasms are much less frequent and severe. The wound progresses slowly.

June 14th.—Patient passes his urine without difficulty, requires to urinate frequently. His appetite is better, and in every respect he is much improved. He is allowed beef essence and milk *ad libitum*. His wound is granulating slowly. Treatment continued.

June 20th.—Muscular rigidity nearly disappeared. Doses of each medicine to be gradually diminished.

July 3d.—Patient able to sit up; is feeble, but rapidly convalescing. Wound nearly healed.

July 10th.—No further treatment necessary.

July 29th.—Patient has nearly abandoned the use of medicine by order. Is entirely recovered, and no other difficulty exists but stiffness of the elbow of the affected side. He walks about, and is in every respect cured of the tetanus. The difference in the effect between the pulv. opii and the acetum opii was in this case most marked and decided. The notes of this case were taken by my able assistant, Dr. Small.

The National Military Pathological Museum.
—Dr. Edward Hartshorne has been authorized to collect, from the different military hospitals in this city, all pathological specimens which have been prepared. As the circular of May last, issued by the surgeon-general, on the subject of preparations for the pathological museum, had not until very recently been circulated at the hospitals, it is probable that but a small amount of pathological material has been preserved.

EDITORIAL DEPARTMENT.

PERISCOPE.

DIGITALIS IN DELIRIUM TREMENS.

Digitalis in large doses has been highly recommended in the treatment of delirium tremens. The size of the dose employed (half a fluid ounce of the tincture) was received with a great deal of distrust by the profession for fear of injurious effects—and the remedy has been very cautiously used in consequence.

We have employed it in the Philadelphia Hospital in the doses recommended, in cases of delirium tremens and in mania, with the greatest satisfaction. We usually give it in combination with the fluid extract of lupulin, and sometimes with black drop.

The following case, published in the *Medical Times and Gazette*, by Dr. Robert Duchesne, of London, is in point:—

"W. A. H., aged thirty-five, of small stature; in good condition of body; fair; of excitable temperament; a small draper or tallyman; of sober habits; has for the past week taken more spirits than usual, and on December 25th indulged very freely, eating almost nothing. First seen on the 28th of December; usual symptoms.

"*Treatment.*—Opium and chloric ether; then morphia, commencing with a quarter of a grain, and increased at last to one grain every four hours, with three ounces of whisky—the *fons et origo mali*—and one pint of beer, with milk and beef-tea, up to January 3d, the day on which I saw him. His condition was this: Pulse 84, soft and full; secretions arrested; pupils contracted; head hot and heavy, dull pain suboccipitally; skin perspiring very freely. Slept three hours last night, three this morning, and has had sleep during the treatment. He had nausea, felt muddled, and in fact was narcotized; the delirium persists. To discontinue the morphia, and take effervescing ammonia mixture with Scheele's acid. Eleven P.M. Has passed urine, but continues very restless and rambling; has taken his milk and beef-tea, with some whisky and beer. To take at three A.M., ʒss tinct. digitalis, aquæ ad ʒjss; spirit lotion to head.

"4th, eight A.M.—Patient would only take half the draught; no effect. To repeat the draught. Two P.M. Slept from half-past nine A.M. to half-past one P.M. Took some beef-tea, and is now asleep. To take ʒij tinct. digitalis, aquæ ʒvj every six hours; milk and beef-tea; beer, no whisky. Ten P.M. Still asleep; two doses taken.

"5th, nine A.M.—Asleep. Woke up at eight, and had some toast and coffee with milk. Nine P.M. Has slept the greater part of the day; has eaten three mutton-chops; no more medicine taken, but

bowels have been very freely relieved both yesterday and to-day; urine normal; no delusions; is convalescent.

"On the following day I put him on citrate of iron and quinine, with nux vomica, and I am about now to take my leave.

"It will be remarked that this was a primary attack, occurring in a young man of tolerably regular habits, although of weak constitution and nervous temperament; that the worst day of the attack was that on which the effects of morphia had become fully developed, and that the effect of the digitalis was most marked and rapid, the pulse becoming firmer, the sweats ceasing, and most comfortable somnolency being immediately induced. It had also an equally-marked action on the intestinal canal. In all, one ounce of the tincture was taken."

GUAIAIACUM IN THE TREATMENT OF DIPHThERIA.

Dr. J. W. Walker, in the *British Medical Journal*, assuming the following as the characteristics of a case of diphtheria, 1. A more or less acute unhealthy form of inflammation affecting the faucial region; 2. The presence of the peculiar leathery exudation; 3. The marked tendency to death by exhaustion, remarks as follows on the treatment:—

"For each of these several characteristics, our materia medica possesses a remedy of almost specific virtue.

"I have long looked upon guaiacum as a specific in common sore-throat; for, no matter in what place, what the age, sex, or condition of the patient, or what the stage of the complaint, I have always administered it, and had reason to be satisfied with the result; indeed, I consider the effect of this remedy in such cases to furnish an example of cure as distinguished from treatment. (*Vide* Dr. Latham's Lectures.) Frequently have I seen cases of cynanche and diphtheria existing at the same time, and in the same family; and I was first induced to give guaiacum in the more severe affection by observing its good effect in cases which, at the onset, were supposed to be examples of common sore-throat. I now unhesitatingly consider guaiacum as the remedy *par excellence* for diphtheria. The presence of the peculiar exudation almost instinctively suggests the employment of the chlorate of potash. For the debility, etc., our sheet-anchors are ammonia and bark.

"My prescription for all cases of diphtheria is the following:—

R.—Potassæ chloratis,	ʒiv;
Tincturæ cinchonæ com.	ʒss;
Tincturæ guaiaci comp.	ʒss ad ʒvj;
Mellis,	q. s.;
Aquæ,	ad ʒviij. M.

"Of this mixture from one tea to two table-spoonfuls may be given, according to age; but the interval between each dose, from one to four

hours, or three times a day, must be regulated according to the severity of the case.

"These, then, I consider the therapeutic essentials in the treatment of diphtheria; but, in a complaint so terrible, it behooves us to resort to every possible adjuvant, however slightly it may contribute to the general good; and under this heading I am disposed to place all topical applications. My plan is to apply (by no means frequently) a concentrated solution of nitrate of silver, believing it to hasten the removal of the exudation, and to induce a more healthy action over the denuded surface. Of gargles, I consider weak vinegar and water, or what is more elegant, dilute acetic acid with infusion of roses, to be as good as any, producing slightly stimulant and astringent effects on the parts, and washing away offensive detached particles. Externally, warmth applied after the manner of poultices, of which a bag of chamomile flowers is as convenient as any, together with mild terebinthinate embrocations applied two or three times a day, are to be recommended. Like most of my fellow-practitioners I avoid mercurials; and should the bowels require moving, castor oil or the milder laxatives suffice.

"The diet should be nutritious, with an increasing allowance of wine from the first. Lastly, we should ever be on the alert to remove as far as practicable the primary cause of the complaint by attention to every sanitary particular.

"In advocating the guaiacum treatment of diphtheria, I must disclaim all credit for originality. Others have recommended it to the notice of the profession; and more, I doubt not, are daily in the habit of carrying it out in practice. What I desire is, that many of my fellow-practitioners may be induced to try a remedy which, from what I have lately read on the subject, is not so extensively employed as it deserves to be."

STRAIGHTENING CONTRACTED JOINTS.

In a clinical lecture delivered at St. Bartholomew's Hospital, and published in the *Medical Times and Gazette*, Mr. James Paget treats of straightening stiffened joints, the patient being under the influence of chloroform. He says:—

"There are two classes of cases. In one, this method was adopted to rectify deformity; in the other, to prevent it—in the latter, when the disease was still in progress; and in the former, when the effects only remained. We should, however, be careful not to attempt this in cases in which there are signs of acute inflammation, nor in cases in which the patients had been found liable to recurring attacks of inflammation. In cases, also, in which the joint contains fluid, or in which the skin is firmly bound down over it, this plan should not be tried. In those in which active disease has terminated, there might be distinguished two kinds of cases: First, those in which stiffness depends on effusion and adhesion of the ligaments and tendons external to the sy-

novial membrane. Of this a good example was then in Darker Ward— one in which the success of the treatment was well shown. The other and more common class of cases was those in which changes had taken place in the true joint itself. In these cases it was true that gradual extension would obtain the same end as the forcible extension under chloroform; but the great length of time taken up (months, or even years) was a great drawback to it.

"The cases in which forcible extension should not be tried, Mr. Paget recapitulated, were: 1. Those in which the inflammation was apt to recur. 2. When the change had been of very long standing. 3. When there was a strongly-marked diathesis, (strumous, syphilitic, etc.) 4. When the skin was involved and adherent over the joint— soundness of skin being an essential condition.

"There were other cases in which, from rigid muscles, a joint would be contracted, there being no affection of the joint itself. This occurred after a blow on a joint, which, however, did not produce inflammation, or in cases where the bone near a joint was fractured, without, however, producing any disease of it. In these cases, under chloroform, the contractions were reducible almost by simple extension, no force being required."

SYPHILIS CONVEYED BY VACCINATION.

"Toward the latter end of May, 1861," we learn from the *London Lancet*, "M. Cagiola, a surgeon at Rivolta, in Piedmont, vaccinated Giovanni Chiabrera, aged eleven months, and in good health, with lymph obtained in a tube sent from Acqui. The operation was performed in the ordinary manner, and with, as M. Cagiola affirms, a very clean lancet. On the tenth day after this, forty-six children were vaccinated with the lymph contained in the vesicle of the child Chiabrera; and ten days after these latter operations, seventeen other children were vaccinated from the lymph of one of the forty-six infants just mentioned.

"Hence we have sixty-three vaccinated children, forty-six of whom were more or less affected with syphilis within two months after the first operation. In the first series of forty-six vaccinations there were thirty-eight cases of syphilis, besides little Chiabrera, the child vaccinated with lymph contained in the tube; and in the second series, comprising seventeen infants, seven were affected. The child Chiabrera was in a state of marasmus on the 7th of October, and the infant from whom the second series of seventeen had been vaccinated, died a month after the operation.

"These facts having come to the knowledge of the Medical Congress at Acqui, from statements made by Dr. Ponza, it was agreed that a committee, elected from among the members of the Congress, should proceed to Rivolta to inquire into these melancholy occurrences. From the able report of Dr. Pacchiotti we extract the following particulars:—

"The investigations of the committee were considerably aided by the unwearied exertions of Dr. de Katt, practicing in the village. It has been found that of the forty-six children affected with syphilis, the cases of only twenty-three could be accurately noted, as the parents of the children neglected to call in medical aid at the proper time. These twenty-three cases were, however, sufficient to enable the committee to come to a clear diagnosis. In the whole forty-six cases, the symptoms of syphilis appeared, on an average, on the twentieth day after vaccination, namely, varying from ten days to two months. Sometimes the vaccine vesicle, just on the point of cicatrizing, inflamed, and became surrounded with a red, livid, and copper-colored areola, and then spread and suppurated anew. At other times, when the cicatrix was complete, an ulcer would form upon it, the crust of which would fall off, and fresh ones be produced. With some children the vesicles looked bad from the first, and were accompanied by a general eruption, which the country people considered as small-pox, and the characters of which the medical men of the neighborhood were not always able to ascertain. On the 7th ult. it was discovered that seven children had died without treatment, and before attention had been directed to this unfortunately fast-spreading contamination; three were in danger, and fourteen recovering, after having been subjected to a specific treatment. Thirty-eight at that period were under treatment, which consisted of frictions with mercurial ointment in the groins, axillae, and on the limbs, with small doses of iodide of potassium in sarsaparilla syrup.

"The principal symptoms noted by the committee were: mucous tubercles on the verge of the anus and genital organs; sores on the lips and fauces; swelling of the lymphatic glands in various regions; syphilitic eruptions of different kinds; loss of hair; secondary ulcerations of the prepuce; deep tubercles of the cellular tissue; gummy tumors, etc. Two children out of the twenty-three were in a wasting condition, and suffering from syphilitic cachexia; while some of the mothers had mucous tubercles on the nipples. In fact, the twenty-three cases are carefully related in the report, all the children having been seen by the members of the committee.

"As to how the disease thus came to spread among these infants, the committee refrain from coming to a hasty conclusion, and ask for time to solve the mystery; the more so as these facts tend to no less than a complete upsetting of opinions hitherto held as very trustworthy. Thus the belief of two diseases not having the power of developing at the same time upon the same individual falls to the ground, as well as the non-contagious nature of the secondary symptoms of syphilis.

"Dr. Pacchiotti, the author of the report, indulges in commentaries on this sad case, and throws out, with extreme humility, various explanations, though trusting completely to none. He invites discussion and reflection on the phenomena

which have been observed. Nor does he fail to record that such transmission has been before noticed. Dr. Parola has mentioned in his work 'On Doctrines connected with Vaccination,' a case reported by Tassani, of Milan, in which a boy, whose father had at the time secondary sores on the scrotum, was vaccinated from a healthy child. From the vesicle of this boy fifty-six children were vaccinated; out of whom, thirty-five were, in a few months, syphilitic, and had diseased their mothers. On the other hand, it should be noted that lymph from eight of these thirty-five syphilitic children was used to vaccinate a second series of thirty-four, and none of the latter showed any syphilitic symptoms. Another case (which was brought before courts of justice) runs thus: In 1846 many revaccinations took place in the town of K., where a surgeon revaccinated about ten families on account of an epidemic of small-pox; and the punctures, in three or four weeks, degenerated into syphilitic ulcers, followed soon afterward by secondary eruptions. Hübner, in 1852, vaccinated thirteen children; of whom the greater part became syphilitic, though the rest escaped. Experiments have been undertaken by Pitton, Boucher, Ceccaldi, and Lecoq, which prove the transmission of syphilis through vaccination; whereas other experiments made by Schreier, Montain, Bidart, and Taupin show, on the other hand, that vaccine lymph obtained from a child, evidently laboring under hereditary syphilis, produced no evil effects upon those vaccinated with it. The reporter further alludes to an important thesis of M. Viennois, 'On the Transmission of Syphilis by Vaccination'; and to the chapter on the same subject in the book of M. Rollet, of Lyons, entitled 'Clinical and Experimental Researches on Syphilis.'

"From the facts related above, Dr. Pacchiotti deduces the following rules:—

"1. Examine carefully the child from whom the lymph is taken.

"2. Try to learn the state of the parents' health.

"3. Choose, in obtaining the lymph, such children as have passed the fourth or fifth month, as hereditary syphilis, in general, appears before that age.

"4. Do not use the lymph after the eighth day of the existence of the vesicle, as the lymph on the ninth and tenth days becomes dull by mixture with pus, which latter may be of an infectious nature.

"5. In taking the lymph with the lancet, avoid hemorrhage, as there is less danger with pure and transparent lymph.

"6. Do not vaccinate too many children from the same supply."

AFFECTIONS OF THE NERVOUS SYSTEM.

"Chorea.—Aniline.—Aniline is one of the class of artificial alkaloids. It is contained in coal-tar, and may likewise be obtained from in-

digo by distillation. A sulphate of this alkaloid given in doses of one grain three times a day, and gradually increased, is of marked benefit in cases of chorea. The violence of the movements decidedly diminish, and a gradual improvement ensues. When the dose is increased, some depression is produced, and frequently a peculiar blueness of the lips. (Dr. J. Turnbull.)

"*Delirium Tremens*.—The following will generally procure refreshing sleep and relief of nervous excitement. Make an infusion of two scruples of Cayenne pepper in a pint of boiling water, strain it when cool, and make it into punch, adding sugar and lemon to suit the taste. It is very palatable, and will be taken by the patient ad libitum. (Mr. C. Ferneley.)

"*Epilepsy*.—*Bromide of Potassium*.—Bromide, like iodide of potassium, is sometimes of signal use in cases of epilepsy. Probably these cases depend on a local affection of the bones or membranes, which the remedy removes by its absorbent powers. Five grains may be given three times a day. (Dr. S. Wilks.)

"*Neuralgia*.—*Valerianate of Ammonia*.—The valerianate of ammonia is a remedy of great use in some of the severer forms of neuralgia. If retained in a state of crystallization, it rapidly decomposes, and is uncertain in its action. It should be kept in solution. The solution must be of the strength that twenty grains of the salt may be given as the smallest dose. It may be given in this dose every two hours, in infusion of valerian as a vehicle." (Dr. O'Connor.)—*Braithwaite's Retrospect*.

STYPTIC.

"*Sulphuric and Gallic Acids*.—The anti-hemorrhagic properties of these two acids are justly in high repute. They are never given together; yet when combined they act with far greater certainty and efficiency than when given separately. For ordinary cases give the following mixture: B. Acid. gallici, 3ss; acid. sulphurici dil. 3j; liq. opii sed. 3ss; inf. rosæ co. 3vj. M Cap. coch. ij; mag. tertia vel quarta quaque hora." (Dr. L. Earle.)—*Ibid*.

Hygeia Hospital at Fortress Monroe.—For eight months up to July 1st, 1862, there have been received into the Hygeia Hospital 2200 patients, of whom 1329 were returned to their respective regiments, 627 were sent to the general hospital, 29 were discharged and sent home, 201 died, and 44 remained in the hospital July 1st. Many of the deceased were in a dying condition when brought here, and some had even died before being carried into the hospital building. For eighteen days past in July, there have been received into the above hospital 418 patients, of whom 238 have been sent to the general hospital, 166 have recovered and returned to service in their regiments, and 3 died, leaving in all 66 patients in this hospital.—*Boston Journal*.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, AUGUST 2, 1862.

THE MEDICAL PROFESSION IN THE CRISIS.

In the present great struggle to maintain our national existence, a large number from the medical profession have engaged with a valor and devotion which has called forth exalted encomiums from abroad, as well as the applause of patriotism at home, and the heartfelt thanks from the lips of thousands of suffering and dying martyrs in the cause. The profession which so sublimely blends science with humanity, and which is an offspring of peace and good-will toward men, could not stand a disinterested spectator when the demon of national discord is flaunting its dark shadows over the land. The pursuit of the medical man is eminently peaceful, and the sentiment of "peace and science" has been appropriated to the profession which seeks in peaceful toil to lighten the burden of physical infirmity.

Yet in this conflict medical men have surely borne their part. As a class, they are men of culture, and accustomed to the amenities of refined life; but very many have sacrificed the comforts of home and endured the privations of campaigns beneath burning suns, and tracked the snows of a desolate winter for the sake of the cause that alone could thus enlist them. They have ever sought the wounded where they fell, even in the "imminent deadly breach," or have remained to yield themselves as prisoners rather than desert their suffering charge. They have scarcely been behind the foremost in an assault, and have always been the last to leave the field of defeat.

The position of medical men in military service is peculiar, and the duties irregular, uncertain, and arduous. On the battle-field, they must be the cool and self-possessed representative of science, where around them is excitement and turmoil, making mental concentration exceedingly difficult. Participating in the dangers and exposures of the battle-field, the close of the strife does not, as with the combatants, end their toil. The reward of victory is not theirs, and their humane labors to mitigate the havoc of war, if not entirely forgotten, receive but a passing allusion in official reports, and popular applause is not their meed. Their dangers are those of the soldier, and there are those missing from our pro-

fessional circles who have sacrificed congenial occupations and fair remunerations to join in the crusade against the hydra of rebellion, and who are now prostrated with wounds or disease. There are those, too, who had thus devoted themselves who will return no more, and have died the honored death of the patriot soldier, sharing equally with him his privations, his dangers, and his grave.

The necessity of treating devastating disease without proper, or with deficient remedies, is often the sorrow of the army surgeon; and after a great battle, his ingenuity is generally taxed to the utmost for resources for the safety of the wounded, and for surgical appliances essential to their comfort.

The labors of our military surgeons are bestowed on friend and foe. The wounded are attended, whether of his own or of the insurgent forces, in the order as brought to him, or as found on the field, irrespective of rank or any other claim for priority than that of the exigency of their condition. It stands to the credit of the profession that the rebel surgeons have always acted with kindness to our wounded who have fallen to their care. We know of no authentic instance to the contrary, and believe that they have dealt from limited resources with equal favor to the wounded soldiers from both armies. Such has been the conduct characteristic of the military surgeons of all civilized nations in modern times.

Occupying, as military surgeons do, a strictly professional and non-combatant position, it is remarkable that they have in warfare been treated, when seized as prisoners by the enemy, in the same manner as the soldier. It is to be regretted that our government has ever held in confinement, as prisoners of war, surgeons captured in defeats of the rebels, and we are glad to see that an order has issued from proper authority by which such captives are now released. The offer to release surgeons at once, when taken as prisoners of war, has been reciprocated by the rebel leaders, and there exists now a joint agreement that surgeons shall not hereafter be held in captivity.

This regulation will make the field of battle much more free to the duty of the military surgeon, as even in the victorious approach of the enemy, he will, without danger of capture and wearisome imprisonment, be able to seek and succor the fallen loyalist or rebel. The very element and *esprit de corps* of medicine is humanity

in its broadest view, and every one of its votaries will rejoice at the exemption of the military surgeon from one of the most unfortunate contingencies of strife. Let, then, those who have gone to the field, the noble offering of our profession at the altar of patriotism, bear with them always as an impulse to great exertion the benign object of our calling.

"Be then our thrilling war-cry—'For the human race:
Not for ourselves alone, our friends, our home;
But for our fellow-men, beneath heaven's wide-spread dome.'"

EDITORIAL NOTES AND COMMENTS.

Surgeon J. M. Cuyler.—This eminent surgeon having been appointed one of the Medical Inspectors of the U. S. army, has left Fortress Monroe, where he has been stationed ever since the rebellion broke out, and where he was as much beloved and respected in social life, as he was able and indefatigable in the discharge of his arduous professional duties. In addition to his ordinary post duties, Dr. Cuyler had charge of the Hygeia Hospital. His promotion is equivalent to that of a line officer from the rank of major to that of lieutenant-colonel. Surgeon R. H. Gilbert is Dr. Cuyler's successor as Medical Purveyor at Fortress Monroe.

The Burial Service over Anatomical Material.—It has been decided in an English court that the refuse material from dissecting-rooms shall be "decently interred in consecrated ground." In opposition to the rite, it was argued that "inasmuch as the burial service was intended as a solemn rite for the consolation and benefit of the living, its performance in the absence of all witnesses over the decayed fragments of a dissected body was improper and unbecoming." It is probable that the decision was more influenced by a regard for popular clamor on the subject than by any real consideration for propriety in the matter. Some of these "dissected fragments of humanity" may thus have the benefit of having the service read over them a second time.

Refuse Poisons from Factories.—Dr. Lyon Playfair recently testified that in a manufacturing town in England, which is supplied with water from a stream into which the refuse materials of calico-printing are poured, he had found in one pound of mud, obtained from the bed of the stream, from ten to thirteen grains of arsenic.

CORRESPONDENCE.

Domestic Correspondence.

AN INTERESTING CASE—PROBABLE INJURIOUS EFFECTS OF LARGE DOSES OF QUININE.

—, KENTUCKY, June, 1862.

MESSRS. EDITORS:—In June, 1860, a case came under my observation which has puzzled the most learned of the profession in our county, and has proved to be quite interesting. At that time we were about organizing a medical society in the county; some fifteen or twenty members were present, and I laid the case before them; but none seemed willing to venture an opinion as to its nature. The case is one of long standing, and I have concluded to present it for the consideration of the profession through the columns of the REPORTER, hoping that some one will be able to throw light upon its nature and treatment.

The patient is a young man, about twenty-eight years of age, a farmer by occupation, and has been very healthy until the fall of 1859. For the past two years he has been somewhat intemperate. My first visit was made on the morning of the 8th of June, 1860, in the absence of, and at the request of his regular physician. The history of his case he gives as follows: About twelve or eighteen months ago, he had an attack of remittent fever, which lasted some three weeks. The subsidence of the fever left him with a severe pain over the right eye, extending back to the occiput; also vertigo, with heat and flushing of that side of his face, which symptoms were all aggravated by the use of sulph. quinine, which had been given in large doses. At this time there were long remissions of the fever, the attacks only occurring after hard work and stooping; but soon exercise of any kind brought them on, until they became diurnal, and were accompanied with nausea and constipated bowels. Any sudden movement of the head or a stooping posture would bring on vertigo and severe pain, flushed face, and turgid blood-vessels. His pulse ranged from 96 to 100, except during one of the attacks, when it would frequently drop down to 60, and even 40.

Previous to my arrival, he had been bled freely from the arm, cupped, blistered, purged, and freely vomited. His diet was tea or coffee, with dry toast or stale bread. This treatment gave him temporary relief. He had also taken blue mass to slight ptialism, and was still slightly

under its influence. His pulse was lower that morning than usual—80; tongue slightly furred; very little, if any, morbid heat of the body; no pain, but some uneasiness about the head, particularly when in an erect position; then he felt giddy, and would fall over, everything appearing as if there was a heavy mist before him; after this he would vomit, then a heavy pain over the right eye, extending back to the back of the head, would follow. The right pupil was dilated to its fullest extent nearly all the time that I saw him. I gave him a tonic and left him; but was summoned again the same evening, the messenger saying that he was dying. On my arrival I found him bathed in a cold, clammy sweat; pulse 36; respiration hurried and laborious; had been vomiting a glairy mucus similar to the white of an egg, and was suffering great pain in the head, representing it as if there was a heavy weight there pressing the brain through the eye and back part of the head; the extremities were cold. I gave him carbonate of ammonia, gr. iij, best brandy, f3ss, every half hour until reaction was established; but with the reaction came the flushed face, turgid blood-vessels, and in an instant he was insensible.

As consciousness returned, the symptoms mentioned above returned. Upon a more thorough examination of his case, I found that some months previous to the attack of fever he had been thrown from his horse, falling on his head, was carried home insensible, and remained so for about sixteen hours. A dull, heavy headache, which lasted for several days, remained. After that had passed off, he felt as well as he ever did, and continued so until he was taken with the fever. His appetite and digestion were variable. For two or three days at a time, he would eat heartily, and would experience a heaviness about the stomach, with great restlessness, and in three or four hours would vomit, throwing up whatever he had eaten, covered with glairy mucus, after which digestion would go on very well for about the same length of time. I placed him on pil. hydrarg. gr. v, hyd. chlor. mit. gr. i, every night, with the view of keeping up the mercurial effect. Bismuth subnit. gr. x, three times a day, after each meal, and an emetic every third or fourth day; cloths dipped in cold water were applied to the forehead.

On the sixth or seventh day after he was placed on this treatment, he remarked (after having vomited freely) that something seemed to give

way about the head, and now he felt as though there was a ball rolling about in his cranium. A few days afterward, he said his head was all right, except giddiness when he rose up, which we attributed, in a great measure, to the loss of blood, and the horizontal position he had necessarily occupied for such a length of time.

In a few days the symptoms began to return; the mercurial had lost its effect. We then changed the treatment entirely, putting him on hydrarg. protiodidi, gr. iss, every night. Potassii iod. gr. v, three times a day, after eating, and an infusion of quassia of U. S. D. and tinct. ferri chlor. gtt. x, three times a day, just before eating, with nitro-muriatic acid-bath night and morning, and cold-water douche to the spine. In two weeks' time he was able to walk about the house and yard, and to move his head as he pleased without pain or uneasiness; but the symptoms would occasionally return.

Satisfied that we could do nothing further for him, and that time, not medicine, could only restore him to health fully, we so informed the friends and left him. Another physician was thereupon employed, who pursued very nearly the same course for awhile, and then resorted to quinine, the use of which was speedily followed by a return of all the former symptoms with aggravated force and violence. The depletory system was again resorted to, and two setons were inserted in the back of the neck, and kept there some eight or ten months. This, like the other treatment, gave him relief for awhile.

Thus the case now stands, only that the "spells" do not return so often, nor are they so violent. He has been on a low diet all this time, rarely ever touching meat of any kind, and when he does, it is only once a day, and for his dinner, and in small quantity. He has now passed into the hands of another physician, who is treating the case for derangement of digestive organs. Will you, or some of your correspondents, give us some light on this intricate and difficult case?

C. F. HART, M.D.

GUN-COTTON AS A STYPTIC.

ROCHESTER, N. Y., July, 1862.

MESSRS. EDITORS:—Allow me the privilege of using the columns of the *REPORTER* to make a few statements in reference to the excellence of gun-cotton as a styptic. Many of your readers may be already in possession of the knowledge of this fact; but for the benefit of such as may be in

ignorance regarding it, I offer these suggestions, deeming it very important that so valuable an aid in military surgery, as well as in private practice, should be made useful in the various appliances to which it is so admirably adapted. In various cases, in my own experience, where all other styptics have failed, gun-cotton has answered the desired end *immediately*. Not only does it operate as a blood-stauncher, but also as a tampon, depressing veins and arteries, and as an antiseptic. Its uses are beautiful in all wounds, in all cases of amputation and extirpation serving as an admirable cushion.

It will be found, moreover, to be remarkably efficacious in all cases of nasal and dental bleeding. In obstetrics, placenta prævia, etc., it will be found to be a most valuable aid. Henceforward, then, let this precious handmaid to surgery be understood under the soubriquet of *surgical*, rather than *gun, cotton*.

GERARD ARINK, M.D.

Army Correspondence.

MEDICAL AFFAIRS AT FORTRESS MONROE.

A correspondent of the *American Medical Times* writes as follows concerning medical affairs at Fortress Monroe:—

The Department of Eastern Virginia is not less the seat of medical than military interest. Its hospitals are filled to overflowing with the sick and wounded from the battle-fields about Richmond. This immense influx brings the utmost pressure upon the medical officers who administer the affairs of the department. The medical Director, Dr. John M. Cuyler, U. S. A., upon whose broad and well-worn shoulders falls the burden of this unparalleled responsibility of providing for the cargoes of sick daily arriving, proves himself equal to the task. Ever engaged, yet attentive to the wants of the humblest, constantly harassed with the endless details of business, yet always affable and courteous, Dr. Cuyler seems peculiarly well adapted to the position he now occupies. But his friends (and who that has come within the circle of his acquaintance is not his friend?) will rejoice to learn that government has called him to another and still more important sphere of duty. He is the senior officer of the Corps of Medical Inspection, recently appointed by the President, and attached to the Medical Bureau. It is to be regretted that the same discretion has not been exercised in the selection of the entire corps. The Medical Purveyor, Dr. R. H. Gilbert, is an efficient officer, and gives order and system to the dispatch of business. He has lately improved the *armamentarium* of the military surgeon. His general operating case has

not received the attention it deserves. It is compact and yet complete to an extent surpassing any case I have ever examined. I regret that Dr. Smith has not illustrated it in his *Hand-Book of Surgical Operations*.

The hospitals in this vicinity are the Mill Creek Hospital, in charge of Brigade-Surgeon John W. Hunt; the Chesapeake Hospital, in charge of Brigade-Surgeon R. B. McKay; and the Hygeia, (now merely used as a depot for the receipt and transfer of the wounded,) in charge of Brigade-Surgeon Bontecon.

The Mill Creek Hospital consists of a number of buildings so arranged as to carry out the idea, to some extent, of the Pavilion Hospital. The main building is 250 feet in length by 50 feet in width, a rude board structure, the entire area being a single ward, accommodating 200 patients. The ventilation is very perfect, and notwithstanding the hospital is filled to its utmost capacity with the severely wounded, the atmosphere is not perceptibly tainted. Three other buildings have been erected adjacent to this hospital on a similar plan, and several others will be constructed. As yet, erysipelas has scarcely appeared in this hospital, and pyemia is not very frequent. Great credit is due to Dr. Hunt for the efficient management of this institution; with rare administrative ability, he combines the sound judgment of a discreet and experienced surgeon; the knife is never used as an experiment, and rarely as a *last resort*—the common plea of the mere operator. The following gentlemen compose the surgical staff of the hospital: Drs. Orsamus Smith, T. B. Crooker, J. H. Reynolds, T. E. Waller, L. Beers, C. McCormick, L. S. Bowles; Medical Cadets, E. E. Luster and O. M. Pray.

The Chesapeake Hospital is the old seminary of that name, standing on the shore of the James River, about two miles from the fort. It is a large, fine building. The ventilation is very imperfect, as the rooms are small; but this defect is remedied by the location, which is close to the river, and by the freedom from surrounding buildings or forests. Erysipelas does not appear here, and pyemia is seldom met with. Dr. McKay is a very capable officer, and manages the details of this hospital with great success. Like Dr. Hunt, he is conservative in the practice of surgery, and not a few patients may thank him for taking their discharge from this hospital in the erect rather than the recumbent posture.

Defective Ventilation of Iron-clad Ships.—

The defects of ventilation of the iron-clad vessels, *Warrior*, *Black Prince*, and *Defense*, are attracting attention abroad, and our own iron-clad navy, which is rapidly being constructed, may be benefited by the investigation. The iron covering excludes a free circulation of air, and it is believed that the health of crews cannot be maintained unless an effective ventilation is accomplished by mechanical means. We believe that in the new turret ships thorough provision is made for their ventilation by forcing air through them.

NEWS AND MISCELLANY.

Pennsylvania Army Surgeons.—The following gentlemen having passed a satisfactory examination before the State Medical Board, will be recommended to the Governor for commission as assistant surgeons to the regiments from this State:—

D. Willis Cadwallader, Bucks County; G. W. Thompson, Huntingdon County; N. C. McMorris, Perry County; D. J. Evans, Berks County; J. B. Newbaker, Northumberland County; F. L. Haupt, Northumberland County; P. J. Nichols, Chester County; J. S. Kemp, Chester County; G. A. Prinson, Lycoming County; G. W. Burke, Franklin County; Martin Rizer, Philadelphia County; T. H. Sherwood, Philadelphia County; J. H. Hayes, Clinton County; P. A. Boyle, Philadelphia County; L. H. Adler, Philadelphia County; H. Foote, Philadelphia County; S. Styers, Philadelphia County; G. H. Calver, Berks County; J. A. F. Magnin, Philadelphia County; R. Sargeant, Montgomery County; M. F. Price, Philadelphia County; J. Houston, Lancaster County; J. P. Burchfield, Centre County; C. W. Spayde, Philadelphia County; J. M. Morrison, Chester County; L. Oberholzer, Chester County; W. B. Erdman, Lehigh County; W. S. Hendrie, Bucks County; W. C. Buckley, Chester County; Jno. Aiken, Chester County; Jno. T. Walton, Philadelphia County; Henry C. Steedman, Union County; W. P. Book, Lawrence County; J. R. Reinholdt, Lawrence County; Chas. H. Wilson, Columbia County; C. McErven, Indiana County; W. C. Phelps, Wayne County; Thos. F. Corson, Montgomery County; F. F. Burneiser, Philadelphia County; Wm. M. Doriand, Philadelphia County; T. S. Gardner, Huntingdon County; J. H. Roberts, Alleghany County; Henry Wadsworth, Philadelphia County; E. J. Groon, Bucks County; Henry C. Eckstein, Philadelphia County; Chas. B. Reible, Philadelphia County; David D. Kennedy, Chester County; Jno. Young, Philadelphia County; Wm. C. Morrison, Chester County; Jno. B. Downey, Lancaster County; Thos. J. Keeley, Montgomery County; Edwin Keeley, Montgomery County; Thomas B. Lastrels, Crawford County; Samuel R. Sample, Lancaster County; Manoaah S. Long, Berks County; Samuel Sanat, Northampton County; O. C. Hagendobler, Lancaster County; J. H. Hasenplug, Snyder County; George R. Thompson, York County; Jno. W. Flowers, Bucks County; P. R. Waggoner, Snyder County; B. F. Waggoner, Snyder County; David M. Marshall, Indiana County; D. G. Caldwell, Jefferson County; Thomas M. Laney, Indiana County; Jno. Feny, Blair County; J. L. Cummings, Mifflin County; D. C. McCormick, Union County; H. M. Nagle, Berks County; Michael Thompson, Schuylkill County; M. C. B. Richardson, Wyoming County; C. H. Dana, Wyoming County; W. H. Gunkinger, Philadelphia County; John Wilson, Philadelphia County; Otto Schillier, Philadelphia County; E. R. Westcott, Philadelphia County; J. C. Stanton, Philadelphia County; H. S. Gross, Philadelphia County; George G. Rice, Bucks County; H. P. Hottenstein, Columbia County; C. D. Hottenstein, Columbia County; J. G. Long, Fulton County; Richard Foote, Luzerne County; M. F. Bowen, Snyder County; S. C. Walker, Franklin County; Wm. G. Kerr, Philadelphia County; Francis B. Davidson, Luzerne County; Chas. L. Duffell, Philadelphia County; Hugh Alexander, Philadelphia County; James A. McCullough, Philadelphia County; Jos. T. Shoemaker, Delaware County; Geo. F. Betz, Cumberland County; C. R. S. Millard, Berks County; Thos. A. Helwig, Schuylkill County; Robert Easting, Philadelphia County; J. S. Bishop, Philadelphia County; John W. Keys, Lycoming County; Robert R. Yustling, Dauphin County; H. W. Siddall, Philadelphia County; Abraham Jones, Montgomery County; Thos. E. Statham, Philadelphia County; Reuben S. Shriner, Northampton County; James Stokes, Philadelphia County; J. R. Martin, Lancaster County; James J. Doulin, Chester County; Washington Burg, York County; D. D. Swift, Lancaster County; A. Davis, Luzerne County; John H. Cobb, Susquehanna County; James Fulton, Chester County; H. G. Worrall, Philadelphia County; J. B. Pottinger, Berks County; B. F. Butcher, Bucks County; S. Rosenberger, Bucks County; John S. Angle, Franklin County; Thos. Newman, Delaware County; L. L. Wheeler, Lycoming County; Wm. Goehrig, Lycoming County; Chas. E. Cady, Philadelphia County; B. Van Valsah, Union County; Marshal G. Whitney, Luzerne County; E. H. Horner, Lycoming County; A. Harsberger, Juniata County; Joseph Gibbons, Lancaster County; George W. Hoover, Mifflin County; L. R. Kirk, Chester County; J. J. Comfort, Montgomery County; Nelson L. Rowland, Philadelphia County.

An Atrocious Libel on Harvey at the Paris Academy of Medicine.—Some time since, M. Deschamps, of Melun, in his "Nouvelles Recherches Physiologiques sur la Vie," relates the anecdote of Charles I. having expressed the desire to

Harvey of touching the exposed heart of a living man. A painter has embodied this in a picture, which now does not adorn, but disgraces the walls of the meeting-hall of the Academy. A criminal, having his limbs well secured, lies on a table uttering fearful cries, Harvey having just removed the front of the thorax, exposing the heart, so that his royal master might have the satisfaction of touching the organ. The moment chosen is when the king is passing his finger within the bleeding chest. Supposing this occurrence to have been a fact, what should we think of the good taste of the Academy in emblazoning that which could only be considered a lasting disgrace to science and humanity? But seeing that it is nothing more nor less than an atrocious libel, ignorance of the facts can alone have allowed of the admission of so disgraceful a production. M. Deschamps, in a letter to the Academy, protests against the interpretation the artist has chosen to put upon this passage in his work, and which the scientific character of the illustrious physiologist, and the well-known humanity of the unfortunate king, ought to have rendered impossible. There is no excuse for the ignorance of the Academy in this matter, whatever may be said for that of the painter; for De la Martinière, in the *Mémoires de l'Académie de Chirurgie*, relates the fact as it really occurred. The eldest son of the Viscount Montgomery came from Ireland, having a large aperture in the left side of his chest, (the consequence of a fracture of the ribs, occurring many years before,) and Harvey, requested by the king to report to him upon the case, found the heart exposed and visible. Harvey took him to the king, who put his finger upon the heart, the physiologist taking the occasion of pointing out the insensibility of the organ. Surely, the Academy will at once order so offensive a picture to be removed.—*London Medical Times.*

Dr. Livingstone's Recent African Discoveries.—The Secretary of the American Geographical and Statistical Society has received the following letter from Dr. Livingstone:—

RIVER SHIRE, January 6, 1862.

Having lately returned from the exploration of about two hundred miles of Lake Nyassa, a few notes respecting this part of the lake region of inter-tropical Africa may not be unacceptable to my fellow-members of the American Geographical and Statistical Society.

We carried a boat past the Murchison cataracts of this river in August last, a distance of thirty-five or forty miles. In that space we have five considerable cataracts, of one hundred to one hundred and fifty feet each; but the intermediate spaces are very rapid too, as may be inferred by the total descent being twelve hundred feet. When we launched the boat on the Upper Shire we were virtually on the lake, though sixty miles distant, for that part of the river partakes much of the character of a lake. It spreads out in one spot to a lakelet, ten or twelve miles long, and five or six broad.

On the 2d of September we sailed in Lake Nyassa, and found it to be very deep. Our means of sounding were very imperfect; we had brought a lead line of thirty-five fathoms. Failing to reach the bottom at a mile from the shore, we employed a fishing-line, and found bottom in a bay at one hundred fathoms, or six hundred feet; but a mile outside of the bay we felt none within one hundred and sixteen fathoms, or six hundred and ninety-six feet. The water is cool in consequence of its large volume, and alligators (which, well fed on fish, seldom molest men) allowed us to bathe in its waters whenever we chose. This great luxury can be enjoyed in but few African rivers, and palisades are often made by the natives to protect women in drawing water against these dangerous reptiles.

The shape of the lake is, with the help, perhaps, of a little imagination, somewhat like Italy, on the map. The ankle of the boot is in the narrowest part about eighteen or twenty miles—that is, if we exclude the arms of its southern end. One of these, thirty miles long and ten or twelve broad, is prolonged into the Shire. The other, about the same breadth, is eighteen miles long, and if we reject the boot shape, we may say that the southern end has a forked appearance. It expands up toward the north to fifty or sixty miles; the length is over two hundred miles, probably two hundred and twenty-five, but we failed to reach above the two hundred. It begins in latitude fourteen degrees twenty-five minutes south, and extends into the southern borders of the tenth degree of south latitude. It lies between thirty-fifth and thirty-sixth degrees east longitude, and is very straight.

We sailed along the western shore, and found it to be a succession of bays, all open to the east. We were there during the prevalence of equinoctial gales, and found that furious storms came down with great suddenness from the mountains and highlands with which Lake Nyassa is surrounded. Heavy seas, in which no open boat could live, often get up in fifteen or twenty minutes. There are several small, rounded, rocky islands, covered with forests, which are uninhabited. These would afford no shelter to a ship, for many rocks put out from deep water near them; an anchorage is to be found only near the shore. Five rivers of from fifteen to thirty yards flow into it from the west; possibly another of larger size flows from the north, but we did not see.

The lake rises and falls about three feet between the wet and dry seasons; the water is fresh, but somewhat earthy-tasted, and hard. The population on its shore is prodigiously large; all engaged in catching fish by nets, hooks, creels, torches, or poison. Slavery is the only trade they know. An Arab vessel, called a dhow, had lately been built on the lake to carry slaves across, and we daily expect a steamer, in parts, out from England, to be carried past the cataracts, and launched on its waters for a very different purpose. The natives had never seen Europeans before, and we had to bear to be stared at to

any amount. They were, upon the whole, civil; no fines were levied, or dues demanded. We were, however, robbed in the sphere of the slave operations; the first time we had suffered loss by thieves in Africa. The people are much less honest where slaving goes on than elsewhere, and there they place little value on human life.

We went up to show a mission (sent out by the Oxford and Cambridge Universities) a healthy locality on the island south of Mount Zomba, and in trying to induce a tribe, called Ajawa, to desist from slave-hunting, were attacked with poisoned arrows and guns, and, but for recourse to fire-arms in self-defense, would soon have been made food for the vultures; they were the first who had attacked us in Africa, and seemed maddened by continued successes in clever forays against their fellow-countrymen.

Africa is a continent of the future. It is impossible to recite its capabilities. It is pre-eminently a cotton country, for here the plant is perennial, and requires little of that heart-breaking toil necessary where it is an exotic; no frosts endanger crops, and the best qualities yield largely. Slave-hunting is the greatest drawback known—it depopulates the country so much that labor becomes dead in proportion to its prevalence. The Portuguese possessions on the Zambezi are valueless, because all the labor is deported to Bourbon.

In addition to the missions of the English universities, two other missions in this region are contemplated. Healthy localities can be secured on the highlands, which arise on our east to the height of some seven or eight thousand feet above the sea.

Special Contract.—A suit for damages in a case of fracture of the leg, followed by mortification and amputation, was lately brought before the Court of Common Pleas in Franklin County, Ohio, and resulted in a verdict for the defendant, Dr. G. W. Butler. It was claimed by the defendant on trial, that a special contract was made with plaintiff, previous to treatment, releasing the former from all responsibility as to its result; and the validity of such a contract seems to have been allowed by the judge, and the fact of its existence left with the jury to decide.

The Edinburgh College of Physicians has decided, by a vote of eighteen against sixteen, that women doctors shall not receive diplomas.

Japanese Doctors.—In a conversation which the Russian Ambassador had with the Japanese, he observed that it was to be regretted that their government had not sent over earlier enlightened envoys like themselves, who might have imparted to their countrymen the priceless benefits of our superior civilization. When the interpreter communicated this to his master, great was his surprise and indignation. "What!" he exclaimed, "because you blow your noses and make your bows and courtesies differently from us, do you suppose yours to be the right way, ours the wrong? We pay our doctors as long as we are well, and

